

REMARKS

Applicants would like to thank Examiner A. Olsen for allowing and conducting the interview of March 4, 2005. The substantive matters discussed in the interview are incorporated in the arguments set forth below.

In the Final Office Action, the Examiner rejected claims 1-5 and 14 under 35 U.S.C. § 112, first paragraph, as allegedly failing to "provide enablement for a process that uses [an etchant,] wherein the etching proceeds through the top layer of the target film but stops upon reaching the bottom SiO₂[:]" rejected claim 17 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement because that claim allegedly contains "subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention[:]" and also rejected claim 17 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement because that claim allegedly contains "subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention."

By this Amendment, Applicants amend the specification and claims 1, 14, and 17. Claims 1-5, 14, and 17 remain pending. Of these claims, claims 1, 14, and 17 are independent.

Applicants respectfully traverse the Examiner's rejection of claims 1-5 and 14 under 35 U.S.C. § 112, first paragraph. Although the Applicants do not necessarily agree with the Examiner's characterizations and objections, Applicants have amended the specification and claims 1 and 14 in order to expedite prosecution. The

specification has been amended at pages 7 and 10 such that it now recites that “the etching target film . . . is constituted of the organic polysiloxane film,” thereby rendering the Examiner’s rejection moot. Moreover, claims 1 and 14 have been amended, as suggested by the Examiner during the March 4, 2005 interview, to remove the phrase “as an etch-stopper.” Accordingly, Applicants respectfully submit that claims 1 and 14 satisfy the requirements of 35 U.S.C. § 112, first paragraph, and claims 2-5 are allowable at least due to their dependence from claim 1.

Applicants respectfully traverse the Examiner’s rejections of claim 17 under 35 U.S.C. § 112, first paragraph. Specifically, with respect to the Examiner’s allegation that “the specification provides no guidance as to [obtaining and maintaining the claimed] temperature profile,” Applicants submit that contact-hole temperature control in the present invention is well-known in the art. That is to say, only the specific means by which the claimed temperature profile could be obtained and maintained would have been readily apparent to one having ordinary skill in the art, not the claimed temperature profile. Thus, contrary to the Examiner’s assertions, claim 17 does contain subject matter that is described in the specification in a manner that enables one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to the Examiner’s allegations that the temperature profile recited in claim 17 “is in contrast to the disclosure of the first paragraph on page 8 of the specification,” Applicants submit that the claimed temperature profile of claim 17 is properly supported by the specification. More particularly, as recognized by the Examiner, claim 17 recites “a temperature of a bottom portion of the contact holes is maintained at about -20° C, a temperature of an opening portion of the contact holes is

maintained at about 30° C, and a temperature of a sidewall portion of the contact holes is maintained at about 50° C.” That is to say, claim 17 requires that the bottom portion of the contact holes is maintained at about -20° C, the opening portion of the contact holes is maintained at about 30° C, and the sidewall portion of the contact holes is maintained at about 50° C. Likewise, the first full paragraph on page 8 recites “[f]or instance, the temperature at the bottom of the contact holes is sustained at approximately -20° C, the temperatures at the openings is sustained at approximately 30° C and the temperature at the sidewalls is sustained at approximately 50° C.” Therefore, Applicants submit that both claim 17 and at least the first full paragraph on page 8 of the specification describe the same temperature profile, wherein the bottom portion of the contact holes is maintained at about -20° C, the opening portion of the contact holes is maintained at about 30° C, and the sidewall portion of the contact holes is maintained at about 50° C. Accordingly, Applicants submit that claim 17 is properly supported by the specification, and therefore, satisfies the requirements of 35 U.S.C. § 112, first paragraph.

The Final Office Action contains characterizations of the claims with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicants decline to subscribe to any statement or characterization in the Office Action.

In discussing the specification and claims in this Amendment, it is to be understood that Applicants are in no way intending to limit the scope of the claims to an exemplary embodiment described in the specification or abstract and/or shown in the drawings. Rather, Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-5, 14, and 17 in condition for allowance.

Applicants submit that the proposed amendments of the specification and claims 1, 14, and 17 do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner. Therefore, this Amendment should allow for immediate action by the Examiner.

Finally, Applicants submit that the entry of the Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.


In view of the foregoing remarks and the absence of cited prior art in the Final Office Action, Applicants submit that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art. Applicants therefore request the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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